

Application No. 09/977,339

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An ink jet recording apparatus comprising:

a plurality of nozzles for discharging a functional liquid;  
a mounting table; and  
a substrate.

wherein said plurality of nozzles is divided into a plurality of groups the number of which is fewer than the number of said nozzles, wherein each group contains nozzles located next to each other, and

wherein discharge quantity and flight speed of said functional liquid discharged from said nozzles is regulated for each group by voltage level applied to piezoelectric elements corresponding to said nozzles such that the impact position of the functional liquid on the substrate becomes hard to be displaced even when moving the mounting table at higher speed.

2. (Previously Presented) The ink jet recording apparatus according to claim 1, wherein said functional liquid is ink that is usable to manufacture a color filter.

3. (Previously Presented) The ink jet recording apparatus according to claim 1, wherein said functional liquid is a solution of electroluminophor that is usable to manufacture an EL element substrate.

4. (Previously Presented) The ink jet recording apparatus according to claim 1, wherein said functional liquid is an electrically conducting particle dispersion solution that is usable to manufacture a substrate comprising a conducting wiring pattern.

5. (Previously Presented) The ink jet recording apparatus according to claim 1, wherein positions on ink jet head on which said plurality of nozzles is arranged are divided

Application No. 09/977,339

into a plurality of areas, and nozzles belonging to each area are made to belong to a single group.

6. (Previously Presented) The ink jet recording apparatus according to claim 1, wherein said ink jet head on which said plurality of nozzles is arranged comprises cavities provided for each of said nozzles, a reservoir communicating to said cavities and common to said nozzles, and a supply port for supplying said functional liquid to said reservoir; and

wherein said plurality of groups comprise at least a first group comprising nozzles of said plurality of nozzles positioned close to said supply port, and a second group comprising nozzles of said plurality of nozzles positioned far from said supply port.

7. (Currently Amended) A method for manufacturing a functional liquid applied substrate by an ink jet recording apparatus that has a plurality of nozzles capable of discharging a functional liquid,

said plurality of nozzles is divided into a plurality of groups the number of which is fewer than number of said nozzles, each group contains nozzles located next to each other, comprising the steps of:

regulating, for each group, voltage level applied to piezoelectric elements corresponding to said nozzles for controlling discharge quantity and flight speed of said functional liquid from said nozzles, and

discharging said functional liquid into pixels formed on a substrate such that the impact position of the functional liquid on the substrate becomes hard to be displaced even when moving the mounting table at higher speed.

8. (Original) The method for manufacturing a functional liquid applied substrate according to claim 7, wherein positions on ink jet head on which said plurality of nozzles is

Application No. 09/977,339

arranged are divided into a plurality of areas, and nozzles belonging to each area are made to belong to a single group.

9. (Previously Presented) The method for manufacturing a functional liquid applied substrate according to claim 7,

wherein said ink jet head on which said plurality of nozzles is arranged comprises cavities provided for each of said nozzles, a reservoir communicating to said cavities and common to said nozzles, and a supply port for supplying said functional liquid to said reservoir; and

wherein said plurality of groups comprise at least a first group comprising nozzles of said plurality of nozzles positioned close to said supply port, and a second group comprising nozzles of said plurality of nozzles positioned far from said supply port.

10. (Previously Presented) A method for manufacturing a device comprising a functional liquid applied substrate manufactured by the method according to claim 7.

11. (Original) A method for manufacturing electronic equipment wherein an electro-optical apparatus manufactured by the method according to claim 10 is used.

12. (Previously Presented) A device comprising a functional liquid applied substrate manufactured by the method according to claim 7.

13. (Previously Presented) The inkjet recording apparatus according to claim 1, wherein the voltage level applied to piezoelectric elements is different for at least two groups of the plurality of groups.

14. (Previously Presented) The method for manufacturing a functional liquid applied substrate according to claim 7, wherein the voltage level applied to piezoelectric elements is different for at least two groups of the plurality of groups.